

DERWENT-ACC-NO: 2002-521850

DERWENT-WEEK: 200259

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TITLE: Display with automatic  
brightness control system for a  
vehicle dashboard or portable  
electronic equipment  
includes a logarithmic sensor  
and a control circuit  
selecting a luminance from a  
sequence, and user setting  
buttons

INVENTOR: WEINDORF, P F L; LUTHER WEINDORF, P F

PRIORITY-DATA: 2000US-0747597 (December 22, 2000)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE
LANGUAGE		MAIN-IPC
US 20020118182	A1	August 29, 2002
N/A	000	G09G 005/00
EP 1217598 A2		June 26, 2002
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INT-CL (IPC): G09G003/20, G09G003/34 ,  
G09G005/00

ABSTRACTED-PUB-NO: EP 1217598A

BASIC-ABSTRACT:

NOVELTY - A display (100) has a back light (102), a

display panel (104), a bezel (106), a control circuit (108), a voltage supply (110), user setting buttons (112) and a logarithmic sensor (114). The sensor logarithmically generates a signal in response to ambient light near the lighted display and the control circuit selects a display luminance from a sequence having constant ratio steps. The display luminance is a fractional power function of the ambient light near the display.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following

(a) a display including brightness control using a logarithmic sensor and a user brightness selection control, and selecting a brightness according to day or night

(b) and a method of controlling brightness in a display using a photodiode and logarithmic amplifier sensor.

USE - The display having an automatic brightness control system is used for a vehicle dashboard or portable electronic equipment e.g. computer.

ADVANTAGE - The system and method adjusts brightness perceived as linear changes by a user and allows the user to set a preference. The logarithmic function provides brightness for comfortable viewing and good luminance even at low ambient lighting levels. The method can be applied to a range of displays including backlight, front light and emissive displays.

DESCRIPTION OF DRAWING(S) - The figure shows a side view of a backlight display having an automatic brightness control system.

Display 100

Back light 102

Display panel (106) Bezel 104

Control circuit 108

Voltage supply 110

User setting buttons 112

Logarithmic sensor 114

ABSTRACTED-PUB-NO: US20020118182A

#### EQUIVALENT-ABSTRACTS:

NOVELTY - A display (100) has a back light (102), a display panel (104), a bezel (106), a control circuit (108), a voltage supply (110), user setting buttons (112) and a logarithmic sensor (114). The sensor logarithmically generates a signal in response to ambient light near the lighted display and the control circuit selects a display luminance from a sequence having constant ratio steps. The display luminance is a fractional power function of the ambient light near the display.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following

(a) a display including brightness control using a

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Patent Family Serial Number - PFPN (1):  
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